

# Community Planning for Accident Coverage

WILLIAM J. McDONALD, M.D.

**I**N Missoula, Mont., the group of physicians who treated most of the accident victims in the area became dissatisfied with the first aid given at accident sites and with the lack of planning of community medical coverage for multiple-victim accidents. The small number of seat belts installed in local automobiles was also a safety concern in view of the demonstrated ability of these devices to reduce or eliminate injuries.

A lack of organization seemed to be the chief obstacle to providing safe and adequate first aid to the community's accident victims. This lack hampered the ambulance services, hospitals, physicians, and surgeons, and hindered the work of the police, the fire department, and military officials. Three separate ambulance services, each from a different mortuary, served the Missoula area with little or no coordination among them. The ambulances of all three mortuaries might be called to the scene of an accident where only one was needed, leaving none available for calls to other sites. Sometimes the ambulances were manned with skilled first-aid personnel, sometimes with persons unskilled in first aid.

To promote better first-aid service, a committee from the Western Montana Medical Society first sought to persuade the three ambulance services to unite; as a second step, they planned to offer training for ambulance personnel. However the efforts at unification failed. During this period the medical com-

munity, incensed at mismanagement of several accident cases, decided to help a community telephone answering service establish an independent ambulance service. The telephone service had been seeking financial aid for this purpose, and 36 physicians signed a note for \$3,500 to get it started. It began operating in July 1961.

Because of the direct connection of the new ambulance service to the answering service, police and emergency calls were soon being cleared through the answering service, reducing the number of duplicate ambulance trips. This connection also facilitated contact with the patient's physician and often enabled the patient's personally selected physician to be at the hospital when the patient arrived in the ambulance. Another advantage was that medical advice could be radioed to the scene of the accident.

The financial stake of the physicians in the ambulance service increased their interest in its success and also placed them in an excellent position to review its first-aid care, criticize it where necessary, and seek to improve it. This group soon established a course in first aid which they taught. Open to all ambulance personnel of the community, the course was attended by representatives of ancillary community services and personnel from the two mortuaries still providing ambulance services, as well as by personnel of the new ambulance service.

Within 2 years after initiation of the new service, the caliber of Missoula's ambulance service had improved markedly, the time lapse in providing medical coverage of an accident was reduced, and physicians, hospital personnel, and the general public showed increasing confidence in the community's ambulance service. Following a recent review of the service by a group of physicians who treat accident cases in the

---

*Dr. McDonald, an orthopedic surgeon in Missoula, Mont., presented this paper at the Idaho State Health Conference held in Sun Valley in May 1963. This meeting, planned and sponsored by the Idaho State Department of Health, was the first statewide conference on accident prevention to be held in Idaho.*

area, a revised course in first aid is being offered, designed to improve further the quality of first aid in the area.

A special need for planning medical coverage arises in a recreational area like Missoula where fishing and hunting are almost universal recreations. In the summer and fall many of our medical personnel are off fishing or hunting. Sometimes medical coverage was inadequate when there were a number of casualties at one time. Some of us feared that one school bus accident might more than swamp local facilities. To prevent tragedies arising from inability to muster sufficient medical care, a regulated type of medical coverage was needed.

After considerable discussion and persuasion we succeeded in placing the subject of medical coverage on the county medical society's agenda and in alerting the community to the need for a medical coverage plan. A disaster committee was appointed, and a unified plan developed, coordinating Red Cross, police, fire, military, hospital, and medical personnel of the community. An organization to cope with disaster was worked out on paper. It called for a complete team for each of the three local hospitals. Then one Saturday a disaster situation was simulated, and all designated medical, police, fire, and Red Cross personnel manned their appointed stations and went through a series of planned casualties to test the system; defects, such as incomplete screening of injuries, were corrected.

Six weeks after this practice, a train was derailed a few miles from Missoula, and there were 300 casualties. Fortunately, only a few were severely injured, but all required medical examination, and many needed wounds dressed or sutured, fractures set, and other medical procedures. The community disaster plan prevented chaos. Enough medical personnel were available and adequately divided to provide good coverage. Many of the medical personnel who were out of the community were notified by radio or telephone promptly enough that they could return and lighten the strain of caring for the numerous casualties.

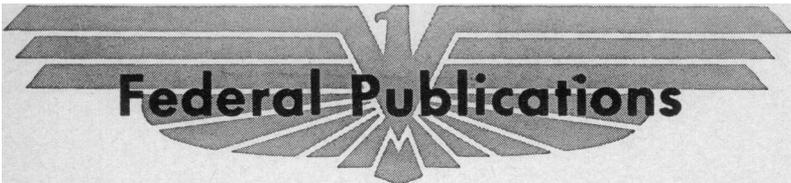
All victims of the derailment were adequately treated. No injuries were subsequently found to have been overlooked, undiagnosed, or untreated. The disaster committee maintained fairly good medical records on all the accident victims, including adequate descriptions of injuries and treatment and the name of the attending physician. These records facilitated settlement by the railroad of damage claims.

Promotion of automobile seat belts had been sporadic in Missoula and poorly followed through. We found a company to supply belts at reasonable prices in gross lots and began a program aimed at getting the physicians of the community to use seat belts. We showed movies, gave talks, and in any place with a captive audience of five persons we would appear with our pamphlets, movie, and a short discussion of the merits of seat belts.

We sold about 250 sets of seat belts to the medical personnel of the community. Currently about 90 percent of Missoula's physicians have them and use them. (However, every morning I can see four sets of belts in the bottom of the surgeon's locker opposite mine, where they have been for 2 years!) A service-club project on seat belts was also developed, and a considerable number of belts sold to the community.

Criticism of such community programs is almost inevitable. One night one of the local automobile wholesalers cornered me after a meeting where I had presented the usual movie and talk on seat belts. He indicated vehemently that he felt we were intruding in his field and were interfering with his chances to gain a justifiable profit from his product. When he finally stopped for breath, I asked, "How many pairs of seat belts were you selling before our seat belt program?" The wholesaler gasped and then replied, "Very few." I then asked how many he had been selling since our program. He relaxed, grinned, and said, "I have a hard time keeping up with the orders."

With many of our local safety and first-aid problems settled, at least in part, we are turning to State politics to try legislative settlement of common statewide problems in accident prevention and safety.



# Federal Publications

**State Employees' Health Benefit Programs.** *PHS Publication No. 947-2 (Health Economics Series No. 2); 1963; 21 pages.* Describes and compares the health benefit programs which 13 States and Puerto Rico have established for their civil service employees and which were in operation in 1962. The data should be of special interest to State and local governments, public officials, and employee associations planning such programs.

**Procedures Governing the Cooperative State-Public Health Service Program for Certification of Interstate Milk Shippers.** *PHS Publication No. 1046; 1963; 17 pages.* Gives brief history of the program, the technical and administrative procedures governing the program, and the constitution of the National Conference on Interstate Milk Shipments.

**Roster of Members of PHS Public Advisory Groups.** *PHS Publication No. 262A; 1962; revised; 234 pages.* Lists names and affiliations of members of 163 PHS public advisory groups. The groups are organized by bureau, and are also indexed alphabetically by key words. Members' names are indexed alphabetically and by State in which employed.

**Directory of State and Territorial Health Authorities.** *PHS Publication No. 75; 1963; revised; 107 pages; 35 cents.* Health department personnel for each State and Territory are listed so as to reflect the organizational pattern of the department. Preceding the listing of health department officials is a listing of all State and Territorial health officers, giving title, headquarters address, and telephone number of each health department. Similar information is shown for State agencies other than health de-

partments administering grant programs of the Public Health Service and the crippled children's grant program of the Children's Bureau.

**Laboratory Techniques in the Control of Anticoagulant Therapy.** *PHS Publication No. 1017; 1963; by Marguerite L. Candler; 44 pages; \$1.* This manual provides a guide to the performance of laboratory techniques in anticoagulant therapy and points out sources of technical error. It also includes essential background in the field of blood coagulation and emphasizes the physiological factors that are altered by drugs used in anticoagulant therapy.

**Hospital Outpatient Services. Vol. I. Selected references annotated.** *PHS Publication No. 930-G-7; July 1963; 33 pages; 30 cents.* References are organized in four categories: general concepts, organization and administration, emergency services, and design and equipment.

**Hospital Central Services. Vol. I. A survey of current literature.** *PHS Publication No. 930-G-8; 1963; 27 pages; 25 cents.* This volume is divided into three parts: I. Annotated bibliography, which includes selected articles found in periodicals; II. Manuals, listing special publications relating to central services; and III. Periodicals and other sources which may be contacted for information relating to central services.

**Refuse Collection and Disposal. An annotated bibliography, 1960-1961.** *PHS Publication No. 91, Supplement E; 1963; 95 pages; 40 cents.* Arranged in sections corresponding to various administrative and operational phases of the field. Recommended for engineers and public works officials, sanitary engineers, sanitarians, health officers, and private contractors.

**PHS Public Advisory Groups: Authority, structure, functions.** *PHS Publication No. 262; 1963; revised; 106 pages.* Briefly describes the 187 advisory groups, councils, committees, boards, panels, and study sections on which the Public Health Service relies for advice. Shows authority, structure, functions, and frequency of meetings.

**Typhoid Fever.** *PHS Publication No. 282 (Health Information Series No. 72); revised 1962; leaflet; 5 cents, \$2 per 100.* Gives cause, sources of infection, and means of prevention and control.

**Hepatitis.** *PHS Publication No. 446 (Health Information Series No. 82); revised 1962; leaflet; 5 cents, \$2 per 100.* Discusses the differences between infectious hepatitis and serum hepatitis and explains methods of transmission, preventive measures, and treatment.

**Leptospirosis.** *PHS Publication No. 696 (Health Information Series No. 93); revised 1962; leaflet; 5 cents, \$2.50 per 100.* Explains the nature of the disease and its mode of transmission from animals to man. Describes symptoms, treatment, and methods of prevention.

**Tuberculosis Beds in Hospitals and Sanatoria, June 30, 1961.** *PHS Publication No. 801; revised 1962; 48 pages; 30 cents.* Contains information on the nationwide status of hospital beds set aside for the care of patients with tuberculosis.

---

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C., 20201.

The Public Health Service does not supply publications other than its own.

---